

REMARKS

This application has been carefully reviewed in light of the Office Action dated July 29, 2005. Claims 1 to 10, 12 to 37 and 39 to 59 are currently in the application, with Claims 1, 6 and 33 being the independent claims. Reconsideration and further examination are respectfully requested.

Initially, Applicants thank the Examiner for the indication that Claims 2, 6 to 10, 12 to 19, 22 to 26, 33 to 37, 39 to 46 and 49 to 53 contain allowable subject matter. Applicants note that Claims 20, 21, 27 to 32, 47, 48 and 54 to 59 are not discussed in the Office Action. Since these claims depend from claims containing allowable subject matter, they are understood also to contain allowable subject matter. If Applicants' understanding of the status of these claims is incorrect, Applicants respectfully request the Examiner to provide the current status of Claims 20, 21, 27 to 32, 47, 48 and 54 to 59.

Claims 1, 6 and 33 were objected to for informalities. The informalities identified in the Office Action have been addressed in the amendment set forth above. Withdrawal of the objection is respectfully requested.

Claims 1 and 3 to 5 were rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 6,356,233 (Miller). Applicants have carefully reviewed the applied reference and respectfully submit that the claimed invention is patentably distinguishable over the applied reference for at least the following reasons.

Independent Claim 1 concerns an antenna system that includes an antenna array comprising multiple antenna elements and an antenna beamforming system. The antenna system further includes a calibration system adapted to calibrate the antenna array in either a transmit mode or a receive mode. The calibration system includes calibration probes interleaved with the antenna elements of the antenna array. The calibration probes are adapted to be transmit calibration probes or receive calibration probes. The calibration system further includes a calibration processing system adapted to calibrate the antenna array utilizing the interleaved calibration probes and a switch for switching among the calibration probes.

Miller concerns the calibration of an array antenna using one or more antenna elements called kernel elements. The Office Action contended that these kernel elements correspond with the calibration probes of the invention specified in Claim 1. However, the kernel elements described in Miller are antenna elements arranged in the antenna array. As such, the kernel

elements are not seen to be interleaved with the antenna elements of the antenna array, but rather are seen to be antenna elements that are part of the antenna array itself. Accordingly, Miller is not seen to teach the feature of calibration probes interleaved with the antenna elements of an antenna array and therefore does not anticipate the claim. Reconsideration and withdrawal of the § 102(b) rejection of Claim 1 are respectfully requested.

Claims 3 to 5 depend from independent Claim 1 discussed above and therefore are believed be allowable over the applied reference for at least the same reasons. Because each dependent claim is deemed to define an additional aspect of the invention, however, the individual consideration of each on its own merits is respectfully requested.

In view of the foregoing amendment and remarks, the entire application is believed to be in condition for allowance and such action is respectfully requested at the Examiner's earliest convenience.

Applicants' undersigned attorney may be reached in our Orange County office by telephone at (949) 851-0633. All correspondence should continue to be directed to our address given below.

Respectfully submitted,

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